

REMARKS

Claims 3-24, 34-46 and 59-65 remain for prosecution in the present application.

Claims 16, 38, 62 and 63 have been amended to correct the absence of antecedent basis for "said periphery" in each claim. This is a clerical correction only. Limitations concerning the skirt bead are moved from independent claims 16 and 38 to respective new dependent claims 64 and 65, and from independent claims 62 and 63 in favor of respective dependent claims 24 and 46.

Claim Objections

Claim 45 has been amended as suggested by the Examiner. This amendment is clerical only, and does not involve a change of the scope of the claim.

Claim Rejections - 35 USC 112

Claim 22 has been amended to be consistent with other claims having the same language, such as claim 10. This is a clerical correction only.

The dependencies of claims 45 and 46 have been corrected. Claims 45 and 46 originally were dependent from claim 44. Claim 44 subsequently was rewritten in independent form as claim 63, so claims 45 and 46 should depend from claim 63 rather than claim 62. This again is a clerical correction only.

Claim Rejections - Prior Art

All independent claims 16, 38 and 59-63, as well as various dependent claims, have been rejected over the combination of Towns 4,674,642 and Hawkins 4,896,782. Independent claim 60, as well as various dependent claims, additionally has been rejected

over the combination of Hawkins, Li 4,700,860 and Braun 3,425,579. Reconsideration is respectfully requested.

Before discussing application of the references by the Examiner to the application claims, standards for analysis of these references and application of the same to the invention bear restating. As the CCPA well stated in *In re Carroll*, 601 F.2d 1184, 1186, 202 USPQ 571,572 (1979):

One of the more difficult aspects of resolving questions of non-obviousness is the necessity "to guard against slipping into use of hindsight." *Graham v. John Deere Co.*, 383 U.S. 1, 36, 148 USPQ 459, 474 (1965). Many inventions may seem obvious to everyone after they have been made. However, 35 U.S.C. 103 instructs us to inquire into whether the claimed invention "would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." Thus, in deciding the issue of obviousness, we must look at the prior art presented from a vantage point in time prior to when the invention was made, and through the eyes of a hypothetical person of ordinary skill in the art.

The standard of Section 103 is thus not what could be read into the references having applicant's disclosure and claims in mind.

It is difficult but necessary that the decisionmaker forget what he or she has been taught at trial about the claimed invention and cast the mind back to the time the invention was made..., to occupy the mind of one skilled in the art who is presented only with the references, and who is normally guided by the then-accepted wisdom in the art.

W. L. Gore & Assoc., Inc. v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 313 (Fed. Cir. 1983). Simply stated, the references must be viewed for what they teach the artisan who has in mind the problem to which applicant's invention is directed, but not applicant's solution to the problem. Unquestionably, such standards for review are often more easily

stated than applied, particularly when applicants' solution is seemingly simple and straightforward when viewed with the benefit of hindsight. *In re Carroll*, supra, *In re Sporck*, 301 F.2d 686, 689-690, 133 USPQ 360, 363 (CCPA 1962), *In re Marshall*, 578 F.2d 301, 198 USPQ 344 (CCPA 1978).

It is axiomatic that, to support a rejection of the subject combination claims on the basis of obviousness, it is necessary that the references teach, suggest or provide incentive to combine elements from various references to obtain the invention. *Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 USPQ 2d 1434 (Fed. Cir. 1988); *In re Geiger*, 815 F.2d 686 (Fed. Cir. 1987); *Ex parte Clapp*, 227 USPQ 972 (POBA 1985). This is particularly true, of course, where the elements of the references would be required to coact with each other in a manner different from the way they coact in the reference disclosures, or where the key or distinguishing element of the claims is completely lacking in the references.

[I]n order to meet the terms of the claims on appeal, the elements of the [prior art] device would have to be arranged in a manner different from that disclosed by [the art]. The elements of the reference would also be required to coact differently from the way they coact in the arrangement disclosed by the reference. The mere fact that a worker in the art could rearrange the parts of the reference device to meet the terms of the claims on appeal is not by itself sufficient to support a finding of obviousness. The prior art must provide motivation or reason for the worker in the art, without the benefit of applicant's specification, to make the necessary changes in the reference device.

Ex parte Chicago Rawhide Mfg. Co., 223 USPQ 351, 353 (POBA 1984). See also *Fromsom v. Advanced Offset Plate, Inc.*, 755 F.2d 1549, 225 USPQ 26 (CAFC 1985); *In re Sernaker*,

702 F.2d 989, 217 USPQ 1 (CAFC 1983) and *Ex parte Stauber*, 208 USPQ 945, 946 (POBA 1980).

Simply stated:

It is wrong to use the [application] as a guide through the maze of prior art references, combining the right references in the right way so as to achieve the result of the claims in suit. Monday morning quarterbacking is quite improper when resolving the question of non-obviousness in a court of law.

Orthopaedic Equipment Co., Inc. v. U.S., 702 F.2d 1005, 217 USPQ 193, 199 (Fed. Cir. 1983).

When the incentive to combine the teachings of the references is not readily apparent, it is the duty of the Examiner to explain why combination of the reference teachings is proper.

Ex parte Skinner, 2 USPQ 2d 1788, 1790 (BPAI 1987). This the Examiner has not done in the present application.

The Combination of Towns 4,674,642 and Hawkins 4,896,782

All independent claims 16, 38 and 59-63 remaining in the application, as well as various dependent claims, have been rejected over the combination of the Towns and Hawkins references.

The Towns reference discloses a pressure-indicating closure assembly that includes a resilient "liner 22" (column 3, line 9) within a closure shell or member 12. The closure shell is molded onto the liner (column 4, lines 39-41 and column 3, line 31 to column 4, line 3). That is, the liner 22 is first injection molded in the mold configuration illustrated in FIG. 3, and then the closure member or shell is injection molded over the liner in the mold

configuration of FIG. 4. The liner is secured to the shell during the shell-molding operation as the shell rib 30 is being molded (column 3, lines 57-64). Thus, the periphery of the liner is secured to the shell during the shell-molding operation, while the center portion of the liner is free to flex axially of the closure shell between the position of FIG. 2 and the position of FIG. 6. The Examiner refers to the element 24 in Towns as "a ring 24 extending from the base wall to engage an undersurface of the closure base wall" (bottom of page 2 of the Office Action). As disclosed in Towns reference, however, the element 24 is a "central projection 24" (column 3, line 10) that functions in combination with the resiliency of the central web portion of the liner to indicate whether the package has been opened. That is, in the closure configuration of FIG. 6, the internal vacuum within the container draws the central web portion of the liner axially downwardly so that the projection 24 does not extend through the aligned opening in the closure shell top panel 14. However, when the package has been opened so that the internal vacuum is allowed to vent, the resiliency of the liner is such that the projection 24 extends through the aligned opening in the shell top panel as shown in FIG. 2 to indicate that the package has been opened. Nowhere in the disclosure of the Towns reference is there any suggestion that the projection 24 could or should engage the underside of the shell top panel 14 for any reason.

Hawkins discloses a closure assembly that includes a cap or shell 14, an insert 26, and an elastic sealing element or O-ring 36. The insert 26 is preformed of pressure-formed metal, layered or laminated plastic material, or oxygen barrier material such as nylon, polypropylene and EVOH (column 4, lines 40-52). The insert is friction fit within the closure shell (column 4, line 9). The Examiner refers to the insert 26 as a "liner." However, it is clear that the function of sealing resiliency is performed by the O-ring 36 and

not by the insert 26. In the rejection based upon the combination of Towns and Hawkins, the Examiner refers to Hawkins for disclosure of an insert 26 “formed as a compression molded laminate having barrier properties” (page 3, first full paragraph of the Office Action). Although it is correct that a compression molded laminate having barrier properties is one form of the insert construction disclosed in Hawkins, this has nothing to do with the independent claims of the present application that do not recite compression molding, a laminated disk (or liner) construction or barrier properties. It also is noted that the insert 26 in Hawkins (not a “liner”) is not molded onto the top wall of the closure shell, but rather is preformed and inserted by friction fit. Thus, it is submitted that Hawkins is not relevant to the present invention as claimed.

Independent Claim 16, and Dependent Claims 17-21 and 64

Independent claim 16 is directed to a plastic closure that includes a plastic closure shell, a plastic disk “loosely retained” within the closure shell parallel to but separate from the base wall of the closure shell, and a resilient liner molded onto the disk. See, for example, closure shell 28, disk 40 and liner 48 in application FIG. 2. The resilient liner in Towns is molded onto the closure shell (by the shell being molded onto the liner), and there is no plastic disk in Towns loosely retained within the shell. Indeed, as noted above, the periphery of the liner is secured to the surrounding shell during the shell-molding operation. In Hawkins, there is an insert fixedly secured by friction fit within the closure shell, and an O-ring carried by the insert. Thus, there is no disclosure or suggestion in either Towns or Hawkins of a plastic disk loosely retained within a closure shell or a resilient liner molded onto the disk.

Furthermore, independent claim 16 recites that the disk includes an axially extending protrusion “for engaging an undersurface of said base wall to space said disk from said base wall” in an orientation “parallel to but separate from said base wall.” See, for example, bead 64 in application FIGS. 5 and 6. The projection 24 in Towns does not engage an undersurface of the closure shell top wall 14 in that reference, and does not space the body of the liner 22 in that reference parallel to the base wall. Note in particular the geometry of FIG. 6, in which the resiliency of the liner draws the central rib portion of the liner into a distinctly non-parallel configuration relative to the closure shell top panel 14.

Claim 16 further recites that the plastic disk includes “an annular ring extending axially from said base wall adjacent to but spaced from” the periphery of the disk, and that the resilient liner is molded onto the disk covering the ring such that the ring urges the liner into sealing engagement with a radially inner edge of a container finish when the closure is secured to the container finish. See, for example, ring 54 in application FIG. 2. There is no such “ring” in either Towns or Hawkins. It is noted in particular that the sealing member 26 in Towns, which is not formed by a liner molded over a ring on a disk, engages the axially facing sealing surface of the container finish in FIG. 6 and not the inside edge of the container finish.

Thus, in summary, claim 16 is clearly allowable over the combination of Towns and Hawkins. Dependent claims 17-21 and 64 are allowable both by reason of dependency from claim 16, and because of the additional novel limitations set forth therein.

Independent Claim 38, and Dependent Claims 39-44 and 65

Independent claim 38 is directed to a package that includes a closure and a container. The closure includes a plastic closure shell, a plastic disk parallel to but separate

from the base wall of the closure shell, and a resilient liner molded onto the disk. Furthermore, claim 38 recites an axially extending protrusion on the disk for engaging an undersurface of the shell base wall to space the disk from the base wall. Furthermore, claim 38 recites an annular ring extending axially from the base of the disk, and that the resilient liner is molded over the ring so that the ring urges the liner into sealing engagement with a radially inner edge of the container finish. All of these claim limitations have been discussed in detail above in connection with claim 16, and in connection with the cited Towns and Hawkins references. Thus, claim 38 is allowable over the combination of Towns and Hawkins for reasons set forth in detail above, as are claims 39-44 and 65 directly or successively dependent from claim 38.

Independent Claim 59 with Dependent Claims 3-9 and 13-15

Independent claim 59 recites a two-piece plastic closure that includes a plastic closure shell, and a plastic disk loosely retained within the shell parallel to but separate from the base wall of the closure shell with a resilient sealing liner molded in situ on the disk. The disk includes an axially extending protrusion for engaging an undersurface of the closure shell base wall to position the disk parallel to but spaced from the base wall. The disk also concludes an annular ring underlying the liner on the side of the disk remote from the base wall, with the ring being spaced from the skirt for urging the liner against a radially inner edge of a container finish when the closure is secured to the container finish. Thus, independent claim 59 is allowable over the combination of Towns and Hawkins for all of the reasons discussed in detail above in connection with claim 16.

Likewise claims 3-9 and 13-15 are allowable by reason of dependency from allowable claim 59, and because of the additional novel limitations set forth therein.

Independent Claim 60 and Dependent Claims 34-37

Independent claim 60 recites a plastic closure that includes a plastic shell, and a plastic disk loosely retained within the shell parallel to but separate from the base wall with a resilient sealing liner for sealing engagement with a container finish. The disk has a flat base and an axially extending bead around a peripheral portion of the disk base to space the disk base from the base wall of the shell. An annular ring is disposed on the plastic disk underlying the liner and spaced radially inwardly from the skirt for urging the liner into sealing engagement with a radially inner edge of the container finish. Thus, independent claim 60 is allowable over the combination of Towns and Hawkins for all of the reasons discussed in detail above in connection with claim 16. Likewise, dependent claims 34-37 are allowable both by reason of dependency from allowable claim 60, and because of the additional novel limitations set forth therein.

Independent Claim 61 and Dependent Claims 11-12

Independent claim 61 is directed to a two-piece plastic closure that includes a plastic closure shell, and a plastic disk loosely retained within the shell parallel to but separate from the base wall with a resilient sealing liner molded in situ on the disk. The disk has a ring spaced from the skirt that underlies the liner and urges the liner against a radially inner edge of a container finish when the closure is secured to the container finish. Thus, independent claim 61 is allowable for these reasons discussed in detail above in connection with claim 16. Furthermore, claim 61 recites that the disk has an annular rib around the radially outer edge of the disk base that underlies the liner for engaging the liner against a radially outer edge of a container finish when the closure is secured to the container finish.

See, for example, rib 78 in application FIG. 8. The annular rib has a radially inwardly directed surface, onto which a peripheral portion of the liner is molded, that extends axially and radially outwardly from the base of the disk. There is no corresponding structure disclosed or suggested in either Towns or Hawkins.

Dependent claims 11-12 are allowable both by reason of dependency from claim 61, which is allowable for reasons set forth above, and because of the additional novel limitations set forth therein.

Independent Claim 62 and Dependent Claims 22-24

Independent claim 62 recites a plastic closure that includes a plastic closure shell, a plastic disk loosely retained parallel to but separate from a base wall of the closure shell, and a resilient liner molded onto the disk. The plastic disk has an annular ring adjacent to but spaced from the periphery of the disk, and the resilient liner is molded over the ring such that the ring urges the liner into sealing engagement with a radially inner edge of a container finish when the closure is secured to the container finish. Furthermore, the disk has an annular rib around a radially outer edge of the disk which underlies the liner for engaging the liner against a radially outer edge of a container finish when the closure is secured to the container finish. Thus, claim 62 is allowable for reasons discussed above in connection with claim 61 and other claims.

Likewise, dependent claims 22-24 are allowable both by reason of dependency from claim 62, and because of the additional novel limitations set forth therein.

Independent Claim 63 and Dependent Claims 45-46

Independent claim 63 is directed to a package that includes a closure and a container. The closure includes a plastic closure shell, a plastic disk retained parallel to but separate from the base wall of the closure shell, and a resilient liner molded onto the disk. The disk has an annular ring that is covered by the liner, such that the ring urges the liner into sealing engagement with a radially inner edge of the container finish. The disk also has an annular rib around the outer edge of the disk base extending away from the closure base wall and underlying the liner for engaging the liner against a radially outer edge of the container finish. Thus, independent claim 63 is allowable over the combination of Towns and Hawkins for reasons already discussed in detail above, as are dependent claims 45-46.

The Combination of Hawkins 4,896,782, Li 4,700,860 and Braun 3,425,579

Independent claim 60, with various claims dependent thereon, has been rejected over the combination of Hawkins, Li and Braun. Reconsideration is respectfully requested.

The Hawkins reference has been discussed in detail above.

Li discloses a closure having an annular sealing gasket 25 “cast in situ” in a groove defined between an annular bead 18 on the undersurface of the base wall and the outer periphery of the closure shell. The gasket 25 is a liquid plastisol that is caused to flow onto the closure shell and then cured in place (column 2, lines 27-36).

Braun discloses a closure assembly that includes a plastic cap or shell 22 and a sealing member or liner 38. The liner 38 is constructed so that the liner is severed by the closure wall 48 when the closure shell is tightened onto the container finish so as to

separate the central or plug portion 50 of the liner from the peripheral portion 52. When the closure thereafter is removed from the container, the peripheral portion 52 stays with the closure shell while the plug portion 50 is retained on the container for removal and discard.

Independent claim 60 recites a plastic closure that includes a plastic closure shell, a plastic disk loosely retained within the shell parallel to but separate from the base wall, and a resilient sealing liner molded onto the disk. The disk has an annular ring underlying the liner and spaced radially inwardly from the skirt for urging the liner into sealing engagement with a radially inner edge of the container finish. The combination of Hawkins and Li suggests at most that the O-ring 38 in Li could be replaced by a cast or “flow in” gasket, as distinguished from a molded liner. However, there is no disclosure or suggestion in the combination of Hawkins and Li of an axially extending bead around a peripheral portion of the disk to space the disk from the base wall of the closure shell. Indeed, the insert 26 is friction fit or otherwise fixedly secured within the shell, as previously discussed. The enlarged peripheral portion of the liner in Braun seals against the opposing surfaces of the closure shell and the container finish, and does not serve any function in any way analogous to the structure and function recited in claim 60.

It therefore is believed and respectfully submitted that all claims 3-24, 34-46 and 59-65 remaining in the present application are allowable at this time, and favorable action is respectfully requested.

Please charge any fees associated with this submission to Account No. 15-0875 (Owens-Illinois).

Respectfully submitted,

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